ENERGY AND ENVIRONMENT CABINET

DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT
200 FAIR OAKS LANE, SECOND FLOOR
FRANKFORT, KY 40601
TELEPHONE NUMBER (502) 564-6716

Application for a Petroleum Contaminated Soil Treatment Facility Permit Form DEP 7129 (April 2011)

Statutes and regulations may be viewed online at the following Web site:
http://www.lrc.ky.gov/search.htm

Solid waste application forms are available at the following Web site:
http://waste.ky.gov/SWB/Pages/FormsandRegs.aspx

DWM OFFICAL USE ONLY

AI#: _____ **Application #:** _____

Kentucky UNBRIDLED SPIRIT

GENERAL INSTRUCTIONS

1. **APPLICABILITY – This form shall be completed and submitted to the Cabinet by persons requesting the issuance of a permit for a petroleum contaminated soil treatment facility as established in 401 KAR 47:205, Sections 3 and 5. If the operator is also the property owner, the applicant shall submit the form as the operator, and it shall be understood that the applicant is both the facility operator and owner. When the operator is not the property owner, both the property owner and the operator shall sign the application.**
2. **ASSISTANCE – Questions regarding this form may be directed to the Division of Waste Management (DWM), Solid Waste Branch at the address listed above or by calling (502) 564-6716.**
3. **SUBMISSION – Submit the original of the completed form to the DWM at the address listed above. If an item is not applicable, check the appropriate box or write "N/A" in the space provided. Type or print legibly in permanent ink.**
4. **LAWS AND REGULATIONS – Applicants are expected to understand and comply with all applicable laws and regulations. The statutes and regulations that apply to petroleum contaminated soil treatment facilities include the following: KRS 224.01-010, 224.40-330, 224.40-650, 365.015, 401 KAR 5:037, 47:025, 47:030, 47:080, 47:120, 47:205, 47:207, 48:205 through 48:208, 48:300, and 48:310. The owner or operator of a petroleum contaminated soil treatment facility shall comply with the operator certification requirements of KRS 224.40-605.**

To assist you in the submittal of a complete and accurate application, DWM has identified the most common errors. These errors are listed below for your convenience:

1. Failure to complete the application. All maps, attachments, and supplemental data shall be submitted with this application.

2. Failure of the owner and operator to properly sign and notarize the application, including having the owner sign when different from the operator. An individual with signature authority for the applicant as defined by 401 KAR 47:160, Section 6 shall sign and notarize the appropriate signature sections of the application.

3. Failure to provide appropriate, fully completed attachments. Maps, drawings, narratives or any attachments that lack sufficient detail or drawings that are not signed, dated, and sealed by a professional engineer or geologist may cause delays in the review and approval of the application.

Application for a Petroleum Contaminated Soil Treatment Facility

Attachments

Attachment #	Attachment Description	Page #
1	Topographic Map	
2	Site Map	
3	Deed, Description of Title, and Usage Restrictions	
4	Lease	
5	Environmental Performance Standards Narrative	
6	Contingency Plan	
7	Fire Protection	
8	Petroleum Contaminated Soil Description	
9	Waste Inspection Program	
10	Waste Analyses Plan	
11	Treatment Process and Equipment	
12	Marketing and Distribution	
13	Treatment Structure Design and Specifications	
14	Design Specifications for the Bottom Liner	
15	Liner Construction Quality Assurance (CQA) Plan	
16	Groundwater User Survey	
17	Fracture Zones Influence	
18	Geologic Cross-Sections	
19	Rock Core Log Data	
20	Map of Geologic Features and Rock Coring Locations	

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Application for a Petroleum Contaminated Soil Treatment Facility

Type or print your responses legibly in permanent ink.

1. Is the operator of the facility also the property owner?

☐ Yes ☐ No

If "Yes", you may skip items 17 – 32.

Applicant Information for Operator

2. Operator Name:
This refers to the corporation, LLC, business, person, government agency, or similar entity that operates the facility.

3. Operator Mailing Address:

4. City: **5.** State: **6.** Zip Code:

7. Operator Location:
Provide the street or physical location. Do not use P. O. Box #.

8. City: **9.** State: **10.** Zip Code:

11. Process Agent or Contact Person: **12.** Title:
Corporations and LLCs must list the Process Agent.

13. E-Mail Address:

14. Phone #: ( ) - ext.

15. Cell #: ( ) - **16.** Fax #: ( ) -

Applicant Information for Owner

17. Owner Name: **18.** County:
This refers to the corporation, LLC, business, person, government agency, or similar entity that owns the property that is the facility.

19. Owner Mailing Address:

20. City: **21.** State: **22.** Zip Code:

23. Facility Location:
Provide the street or physical location. Do not use P. O. Box #.

24. City: **25.** State: **26.** Zip Code:

27. Process Agent or Contact Person: **28.** Title:
Corporations and LLCs must list the Process Agent.

29. E-Mail Address:

30. Phone #: ( ) - ext.

31. Cell #: ( ) - **32.** Fax #: ( ) -

Preparer Information

Complete Items 33 – 42 if the person preparing this form is different from the contact persons named in Items 9 and 20.

33. Preparer's Name: **34.** Company:

35. Mailing Address:

36. City: **37.** State: **38.** Zip Code:

39. E-Mail Address:

40. Phone #: ( ) - ext.

41. Cell #: ( ) - **42.** Fax #: ( ) -

Attachments and Descriptions

43. Provide, as **Attachment 1**, a current, original U.S.G.S. 7.5 minute topographic map(s) with the original application. Clearly mark the location of the facility boundaries and the area within a one-mile radius. Mark and label wells and springs within one mile of the facility boundary. More than one map may be necessary. Do not send aerial photographs in lieu of topographic maps.

44. Total Acreage:

45. Maximum soil treatment volume: Cubic Yards (C.Y.)

46. Provide as **Attachment 2**, a site map, prepared by a professional engineer or licensed land surveyor. The map shall be to scale and clearly show the following:

(a) Orientation of the map (north arrow);
(b) Buildings

(c) Treatment areas
(d) Storage areas
(e) Access roads
(f) Fences
(g) Gates
(h) Floodplains
(i) Floodway
(j) Wells and springs
(k) Surface water bodies including ponds
(l) Property lines
(m) Monitoring wells
(n) Surface water monitoring points
(o) The following buffer zones pursuant to 401 KAR 48:205, Section 3:

Required Buffer Zones for a Petroleum Contaminated Soil Treatment Facility, Minimum Distance	
Structure or Feature	Closest Boundary in Feet
Residences & occupied buildings	500
Drinking water well	300
Surface water body or wetland	300
Perennial stream	300
Karst feature	300
Public road	50
Intermittent stream	50
Ephemeral stream	50
Property line	50

47. Provide as **Attachment 3**, a certified copy of the recorded deed and a copy of declaration of restrictions or easements affecting the proposed permit area including a scaled deed map showing the current boundaries of all property proposed for the facility development and buffer zones, and the ownership of these properties and the ownership of properties adjacent to the proposed facility property boundary.

48. Provide, as **Attachment 4,** a copy of the lease signed by the landowner and applicant or proposed lease giving the applicant permission to treat petroleum contaminated soil on the property and right of entry during construction, operation, and closure of the petroleum contaminated treatment facility.

49. Provide, as **Attachment 5**, a narrative of the methods the owner or operator shall use to comply with the following environmental performance standards:

(a) Floodplain restrictions established in 401 KAR 47:030, Section 2;

(b) Endangered and threatened species established in 401 KAR 47:030, Section 3;

(c) Surface Waters established in 401 KAR 47:030, Section 4;

(d) Polychlorinated biphenyls established in 401 KAR 47:030, Section 8;

(e) Air established in 401 KAR 47:030, Section 10;

(f) Safety established in 401 KAR 47:030, Section 11(1) and 11(3);

(g) Public Nuisance established in 401 KAR 47:030, Section 12; and

(h) Wetlands established in 401 KAR 47:030, Section 14.

50. Provide as **Attachment 6**, a detailed contingency plan for emergencies such as fires, spills, equipment failure, and provisions for temporary storage of waste.

51. Will the facility receive fire protection from a district, city, or county?

☐ Yes ☐ No

If "Yes", attach a statement, as **Attachment 7**, describing the protection.

52. Provide, as **Attachment 8**, a description of the petroleum contaminated soil to be treated. Include the type of petroleum contamination such as gasoline, diesel, oils, or lubricants. Describe the type(s) of media containing the hydrocarbons. Include characterization of the petroleum contaminated soil as required in 401 KAR 48:205, Section 5 and copies of laboratory analysis reports.

53. Provide, as **Attachment 9**, a written description of the waste inspection program to be used to ensure that only permitted soils are accepted for treatment.

54. Provide, as **Attachment 10**, treated soil specifications for the constituents found during waste characterization that are not listed in Table 2 of 401 KAR 48:205, Section 6.

55. Provide as **Attachment 11**, a description of the treatment process and equipment to be used to meet the requirements established in 401 KAR 48:205, Section 6 which includes the following:

- □ Equipment to be used including manufacturer performance data;
- □ Use of fertilizers, inoculants, or enzymes;
- □ Monitoring plan, including sampling volume, parameters, and frequency to verify the reduction of contaminants to or below the levels in 401 KAR 48:205, Section 6, Table 2;
- □ Estimated times to complete treatment;
- □ Sampling plan to document that treatment has been completed in accordance with 48:205, Section 6, Table 2; and
- □ Storage of soil meeting the treatment standards of 48:205, Section 6, Table 2.

56. Provide, as **Attachment 12**, a marketing and distribution plan for the treated media.

57. Provide, as **Attachment 13**, the design and specifications for the roofed storage and preparation structure containing a concrete pad or liner as established in 401 KAR 48:205, Section 3.

58. Provide, as **Attachment 14**, the design specifications for the bottom liner as required by 401 KAR 47:205, Section 3 and 48:205, Section 3.

59. Provide, as **Attachment 15**, the Construction Quality Assurance (CQA) Plan pursuant to 47:205, Section 3 and 401 KAR 48:206 through 48:208.

Geologic and Hydrogeologic Information

60. Complete, in **Attachment 16**, a groundwater user survey including the list of water wells and springs within one (1) mile of the proposed waste boundaries. The survey shall determine the location of springs and wells. Include a topographic map showing springs and wells.

61. Provide the following information for the regional bedrock geologic structure:

(a) Strike and dip of bedrock:

(b) Attitude of faults:

(c) Location of faults relative to the site:

(d) Has fault displacement occurred in Holocene times? ☐ Yes ☐ No

(e) Attitude of Folds:

(f) Location of fold relative to site:

(g) Jointing trends:

62. Provide the following information for the site specific geologic structure:

(a) Strike and dip of bedrock:

(b) Attitude of faults:

(c) Location of faults relative to the site:

(d) Has fault displacement occurred in Holocene times? ☐ Yes ☐ No

(e) Attitude of Folding:

(f) Location of fold relative to site:

(g) Joint attitudes:

(h) Joint spacing:

63. Provide, as **Attachment 17**, a brief description of the influence of fracture zones on the infiltration and movement of water and groundwater.

64. Provide, as **Attachment 18**, a minimum of two (2) geologic cross-sections drawn with vertical exaggeration using published data, bedrock outcrops, and rock core boring information. This drawing shall illustrate the geology of the site and include the seasonal high groundwater table and rock outcrops.

65. Provide, as **Attachment 19**, all rock core log data.

66. Provide, as **Attachment 20**, a map of geologic features and rock coring locations including area 1,500 feet beyond the waste boundary at a scale of one (1) inch equals 400 feet. Include the following information:

- □ Geologic units
- □ Rock outcrop occurrences
- □ Surface depressions
- □ Faults
- □ Folds
- □ Structural Contours
- □ Sinkholes
- □ Springs
- □ Injection wells
- □ Water wells
- □ Surface contours
- □ Location of rock corings
- □ Legend to include symbols
- □ Bar scale
- □ Date
- □ North arrow

67. Provide, as **Attachment 21**, a hydrogeologic characterization of the site. This characterization shall include data, procedures, calculations, and the following information:

A description of the hydrogeologic characteristics of the:

- □ Uppermost aquifer
- □ Geologic units hydraulically connected to the uppermost aquifer

Field test data for:

- □ Hydraulic conductivity
- □ Storage coefficient

- □ Transmissivity
- □ Groundwater hydraulic gradient
- □ Groundwater hydraulic velocity

Based on:

- Multiple well aquifer tests
- Piezometer nest evaluation
- Core evaluation
- Tracer studies for fractured bedrock, weathered limestone, dolomite bedrock, or karst areas
- Other methods common to the practice of geology pursuant to KRS 322A

Characterization of karst conditions for:

- □ Diffuse flow conditions
- □ Discrete flow conditions

Surface Water, Groundwater, and Corrective Action

Provide the following information as established in 401 KAR 47:205, Section 3, 47:206, and 48:300:

68. Provide, as **Attachment 22**, the Surface Water Monitoring Plan including the following:

(a) The proposed locations of the monitoring points shown on the site plans.

(b) A written description of how the monitoring point locations ensure that sampling will characterize the quality of the water unaffected by the facility, as well as determining if water leaving the facility as surface drainage is contaminated with leachate.

(c) A description of sampling protocol and analytical methods to be used.

(d) A monitoring schedule and list of analytical parameters.

(e) Documentation that the applicant currently holds or has applied for a KPDES permit for structures to be used to control storm water run-off and for point source discharges.

(f) Monthly inspections for leachate outbreaks.

(g) Procedures to investigate for leachate outbreaks.

(h) Inspections for leachate outbreaks after each rain event of one (1) inch or more.

69. Provide, as **Attachment 23**, a Groundwater Monitoring Plan that meets the requirements of 401 KAR 48:300, Section 4. The plan shall provide the following information:

(a) A list and description of the specific aquifers proposed for monitoring.

(b) The number, location, and depth of proposed monitoring points. Show the locations of the monitoring points on the site plans.

(c) Provide a brief discussion of the groundwater quality that currently exists based on the Groundwater Quality Characterization pursuant to 48:300, Section 2.

(d) Provide a Groundwater Sampling and Analysis Plan which describes the procedures and techniques designed to accurately measure groundwater quality upgradient and downgradient of the waste treatment area. Include a discussion regarding the chain of custody, as well as field and lab quality assurance and quality control. This plan shall meet the requirements of 401 KAR 48:300, Section 4.

(e) Provide a monitoring schedule and list of analytical parameters.

(f) Provide monitoring well construction specifications pursuant to 401 KAR 48:300, Sections 6.

(g) Is the proposed solid waste treatment site located in karst terrain?

☐ Yes ☐ No

If "Yes", the groundwater monitoring plan shall meet the requirements of 401 KAR 48:300, Section 4, including dye trace studies to determine the nature and extent of karst drainage beneath the site and proposed monitoring locations.

70. Complete, in **Attachment 24**, the information concerning the proposed well locations and depth.

Closure Plan and Cost Estimate

71. Provide, as **Attachment 25**, a plan for closure of the facility describing how the property will be restored or improved, which includes the following:

- □ The maximum soil storage capacity of treated and untreated soil;
- □ The maximum amount of soil in the process of being treated;
- □ Removal of stockpiled soil;
- □ Transportation and disposal of untreated soil at a permitted disposal facility;
- □ Decommissioning of the liner and leachate collection system;
- □ Removal of processing equipment;
- □ Revegetation of disturbed areas; and
- □ Sampling of soils on-site to document that soil parameters comply with 401 KAR 48:205, Section 3.

72. Provide, as **Attachment 26**, a closure cost estimate as established in 401 KAR 47:205 Section 9.

Public Notice Information

Complete the information in this section for the public notice which complies with 401 KAR 47:207, Section 3. Return this information to the cabinet. The bill for the public notice requirements shall be sent to the address listed in Items 2 through 6.

73. County where the facility is proposed to be located:

74. Brief description of business to be conducted:

75. Driving directions from a known public landmark or major intersection:

76. Contact Person:

77. E-mail Address:

78. Phone #: ( ) - ext.

79. Complete, in **Attachment 27**, a list of adjacent property owners. Include mailing addresses and contact information.

Certification by Operator

80. I certify that a copy of the application has been delivered to the county fiscal court or KRS 109 Solid Waste District where the facility will be located pursuant to 401 KAR 47:205, Section 5.

81. Pursuant to 401 KAR 47:160, Section 6, a person with signature authority for the operator such as a sole proprietor, owner, partner, corporate officer, plant manager, LLC member, mayor, county judge executive, or other authorized official shall sign this certification statement.

NOTE: Consultants may not sign the following certification statement.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that KRS 224.99-010(4) provides for penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Name of Person Signing (type or print):

Title of Person Signing: Date: - -

Signature per 401 KAR 47:160: _____

Subscribed and sworn to before me this _____ day of _____, Year 20_____

Notary Public Signature: _____

State of _____ County of _____ My commission expires: _____

Certification by Owner

Complete if the owner is different from the operator.

82. Pursuant to 401 KAR 47:160, Section 6, a person with signature authority for the owner such as a sole proprietor, owner, partner, corporate officer, plant manager, LLC member, mayor, county judge executive, or other authorized official shall sign this certification statement.

NOTE: Consultants may not sign the following certification statement.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that KRS 224.99-010(4) provides for penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Name of Person Signing (type or print):

Title of Person Signing: Date: - -

Signature per 401 KAR 47:160: _____

Subscribed and sworn to before me this _____ day of _____, Year 20_____

Notary Public Signature: _____

State of _____ County of _____ My commission expires: _____

Attachment 16: Groundwater User Survey

Copy this sheet and include additional pages with this attachment.

1. Facility Name:

2. Agency Interest #: **3.** Permit #: -

4. Map Identification Number:

5. Name of resident, owner, or groundwater user:

6. Resident or owner address:
Provide the street or physical location. Do not use P. O. Box #.

7. City: **8.** State: **9.** Zip Code:

10. Phone #: ( ) - **11.** E-Mail Address:

12. Number of people in household:

Water Source

13. Resident's Water Source. Check those that apply and state purpose, such as drinking, livestock, irrigation, washing cars, or similar.

- ☐ Public Water Supply
- ☐ Drilled Well Purpose:
- ☐ Dug Well Purpose:
- ☐ Cistern Purpose:
- ☐ Spring Purpose:
- ☐ Surface Water Purpose:
- ☐ Other. Describe: Purpose:

Well Information

Complete for each well.

14. AKGWA Number:

15. Latitude: Longitude:
Degrees, Minutes, Seconds

16. Date drilled: - -

17. Drilling method:

18. Diameter of casing: inches

19. Total depth of well: feet

20. Depth to top of water: feet

21. Casing depth: feet

22. Casing type:

23. Top of Well Elevation: feet MSL

24. Is pump in well? ☐ Yes ☐ No

25. Is well sealed? ☐ Yes ☐ No

26. Elevation of spring: feet MSL

27. Aquifer / Formation:

28. Approximate yield: gallons per

29. Quality problems:

☐ Iron ☐ Sulfur ☐ None
☐ Manganese ☐ Muddy ☐ Other. Describe:

30. Quantity problems:

31. Does user treat well water? ☐ Yes ☐ No

Method:

32. Does user or owner grant permission to sample well? ☐ Yes ☐ No

33. Comments:

34. Interviewer:

35. Date: - -

Attachment 24: Groundwater Monitoring Well Location and Depth

If necessary, copy this sheet and include additional pages with this attachment.

AKGWA #					
Monitoring Point I.D.					
Latitude **Degrees, Minutes, Seconds**					
Longitude **Degrees, Minutes, Seconds**					
Station Type*					
Aquifer					
Elevation of Spring or Top of Well Casing **Feet above Mean Sea Level**					
Total Depth of Well **Feet**					
Screened Interval					
Static Water Level **Feet above Mean Sea Level**	Date Taken	Date Taken	Date Taken	Date Taken	Date Taken

* Station types can include wells, springs, under drains, sumps, outbreaks, or similar monitoring points.

Attachment 27: Adjacent Property Owners

If necessary, copy this sheet and include additional pages with this attachment.

1. Name: Phone #: ( ) -
Address:
City: State: Zip Code:

2. Name: Phone #: ( ) -
Address:
City: State: Zip Code:

3. Name: Phone #: ( ) -
Address:
City: State: Zip Code:

4. Name: Phone #: ( ) -
Address:
City: State: Zip Code:

5. Name: Phone #: ( ) -
Address:
City: State: Zip Code:

6. Name: Phone #: ( ) -
Address:
City: State: Zip Code:

7. Name: Phone #: ( ) -
Address:
City: State: Zip Code:

8. Name: Phone #: ( ) -
Address:
City: State: Zip Code: